

Claims

1. A film comprising at least one O₂ gas barrier layer substantially consisting of a mixture of an
5 ethylene/vinyl alcohol copolymer (EVOH) and at least one multipolyamide, wherein the multipolyamide is made up of the 3 components

I) hexamethylenediamine/adipic acid (polyamide 6,6),
10 II) hexamethylenediamine/azelaic acid (polyamide 6,9) and/or hexamethylenediamine/sebacic acid (polyamide 6,10) and
III) hexamethylenediamine/isophthalic acid (polyamide 6,I) and/or hexamethylenediamine/terephthalic
15 acid (polyamide 6,T).

2. A film according to claim 1, characterised in that the multipolyamide is made up of

20 a) 15-75 mol% of component I,
b) 15-65 mol% of component II and
c) 10-70 mol% of component III,

wherein the total quantity of components I-III must
25 always add up to 100 mol%.

3. A film according to claim 1, characterised in that the multipolyamide is made up of

30 a) 15-60 mol% of component I,
b) 15-55 mol% of component II and
c) 10-45 mol% of component III,

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wherein the total quantity of components I-III must always add up to 100 mol%.

4. A film according to claim 1, characterised in that the multipolyamide is made up of

- a) 35-55 mol% of component I,
- b) 15-55 mol% of component II and
- c) 10-30 mol% of component III,

wherein the total quantity of components I-III must always add up to 100 mol%.

5. A film according to any one of claims 1 to 4, characterised in that the ethylene/vinyl alcohol copolymer consists of 20-50 mol% ethylene, preferably 42-48 mol% ethylene, particularly preferably 38-48 mol% ethylene.

6. A film according to any one of claims 1 to 5, characterised in that the O₂ gas barrier layer consists of a mixture of 10-45 wt.% EVOH and 55-90 wt.% multipolyamide, in each case relative to the total quantity of the mixture.

7. A film according to claim 6, characterised in that the O₂ gas barrier layer consists of a mixture of 20-40 wt.% EVOH and 60-80 wt.% multipolyamide, in each case relative to the total quantity of the mixture.

8. A film according to any one of claims 1 to 7, containing at least one outer layer, preferably two

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outer or surface layers, at least one of which layers is heat-sealable.

- 5 9. A film according to claim 8, characterised in that a mixture of ethylene/vinyl acetate copolymer (EVA) and LLDPE (linear low density polyethylene) is used as the outer layer material.
- 10 10. A film according to claim 9, characterised in that a mixture of 40-65 wt.% of an ethylene/vinyl acetate copolymer and 35-60 wt.% of LLDPE, wherein the total quantity of the polymer components must always add up to 100 wt.%, is used as the heat-sealing layer material.
- 15 11. A multilayer film according to any one of claims 1 to 10, characterised in that it is made up of the O₂ gas barrier layer and 2 outer layers.
- 20 12. A film according to claim 11, characterised in that the layers are in each case joined together by a coupling agent layer.
- 25 13. A film according to claim 12, characterised in that the coupling agent layers are based on a mixture of maleic anhydride-grafted ethylene/vinyl acetate copolymer and LLDPE.
- 30 14. A film according to claim 12 or 13, characterised in that at least one coupling agent layer is coloured.

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15. A film according to any one of claims 1-14,
characterised in that the film is monoaxially,
preferably biaxially, drawn.
- 5 16. A film according to any one of claims 1-15,
characterised in that the film comprises at least one
crosslinked layer.
- 10 17. A film according to any one of claims 1-16,
characterised in that the film is shrinkable.
18. Use of a film according to any one of claims 1 to 17
for packaging perishable, gas-releasing products,
preferably foodstuffs.
- 15 19. Use according to claim 19 for packaging cheese,
preferably cheese which is still ripening.
- 20 20. Use according to claim 19 or claim 20 for packaging
semi-hard and/or hard cheese.
21. Packaging for perishable, gas-releasing products,
preferably foodstuffs, made from a film according to
any one of claims 1 to 17.
- 25 22. Packaging for cheese made from a film according to any
one of claims 1 to 17.
- 30 23. A cheese ripening pouch made from a film according to
any one of claims 1 to 17.